NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

New Jersey Draft Global Warming Response Act Recommendation Report
January 12, 2009 Stakeholder Meeting – Transportation :
Vehicles, Fuels, and Infrastructure
Summary of discussion and written comments

FOCUS QUESTIONS

1. What are the best ways to get medium-duty delivery-type trucks to begin converting to hybrid-electric or pure electric drive as is occurring in Europe (London package delivery trucks for example). These centrally rechargeable vehicles are very amenable to battery- electric propulsion. Should the State mandate the transition to hybrids and/or ZEVs for these fleets?

2. What key criteria must be met before the average driver in New Jersey will purchase a ZEV, e.g., minimum range, cost, maximum speed, recharge time, battery replacement costs, etc?

3. Would you use a vehicle powered by natural gas if you had a home refueling appliance and the vehicle had a 250 mile range? If not, what subsidies would be required for you to consider the switch?

4. Is a new car feebate program based on vehicle emission levels a viable program for New Jersey? Should vehicles used for construction be exempt from the feebate program? Should other vehicles applications be exempt?

5. Roughly what dollar amount of fee do you think will have an impact on consumers' decisions so that they will not purchase a fuel-inefficient vehicle and instead consider more fuel-efficient models? Likewise, what dollar level of rebate do you think will cause a significant number of consumers to choose a more fuel-efficient vehicle?

6. What factors need to be considered when developing and implementing a Low Carbon Fuel Standard?

7. Does this draft report create the appropriate transportation vision for the future? If not, what's missing?

8. What specific actions are needed now to ensure the transportation vision outlined in the draft report?

SUMMARY OF DISCUSSION AND WRITTEN COMMENTS

Liquefied Natural Gas (LNG), Compressed Natural Gas (CNG), Liquefied Petroleum Gas (LPG)

- Open existing LNG fuel stations to municipalities and other users (Southern California).
- There are LNG vehicles in the State fleet, but only three fueling stations.
- LNG retrofit kits are available in Peru. They can be installed by a mechanic.
- Argentina subsidizes LNG retrofits to the tune of $1,800 per vehicle.
- It is possible to construct an LNG fuel station (a "fill") at a residential site.
- Manufacturers offer some automobile models with an LNG option in other countries, but not the U.S.
- There is only new LNG vehicle on the market. It is dedicated LNG; you can not use other fuels. This approach lacks flexibility
- Future LNG pricing will effect the marketability of LNG vehicles.
- Provide incentives, grants and tax concessions for the use of currently available, proven alternate fueled vehicle options, such as Compressed Natural Gas and Liquefied Petroleum Gas in areas such as infrastructure development, incremental cost of alternate fueled vehicle etc., similar to those available in other states.
- Review and change current legislation which adversely affects the use of aftermarket conversion of vehicles to CNG.

Diesel, Biodiesel

- Institute a progressive ban on dirty diesel trucks. The ban would be mandatory, but phased in (Los Angeles, CA). Los Angeles)
- Cautionary tale: Germany subsidized biodiesel. Now the biodiesel industry in Germany is struggling because the source of the biodiesel subsidy is a tax on regular diesel.
- Do not impose limitations on the use of grain biodiesel. Advancements in grain biodiesel have allowed the technology to develop for other feedstocks, including waste products and other biological materials as well. To wait for the development of a completely sustainable, zero emission biofuel would potentially derail the essential developments in infrastructure and distribution for which grain-based biofuels are paving the way.
- Prior to NJ DEP making any recommendation on biofuel feedstock limitations, a comprehensive examination of biofuel's lifecycle impacts should be made.

Low Carbon Fuel Standard

- Opposition to state or regional Low Carbon Fuel Standard: Implementation of a national LCFS would be more effective at addressing the GHG problem without creating state-to-state conflicts. Effort should be directed at resolving the

science behind a LCFS to inform federal policymakers, and not to adopt LCFS programs state-by-state or even regionally. State or regional actions to reduce GHG emissions related to transportation fuel use creates inefficiencies and undue complexities with little to no benefit.

- Implement a national LCFS within the context of a fully integrated federal climate change policy, such as the set of linked policy recommendations outlined in the US Climate Action Partnership *Blue Print for Legislative Action.* (www.us-cap.org/pdf/USCAP_Blueprint.pdf)

Fuels (misc.)

- Tax gasoline. The price of gas influences driver behavior.
- Move now to create incentives for *all* types of alternative fuels. Then, let the market control which will emerge as the winner(s).
- Support market-based approaches
- Reduce the speed limit.

California Low Emission Vehicle Standard

- There has been no stakeholder process to discuss the California LEV standards. California required a stakeholder process. There were stakeholder processes to discuss implementation of the NJ Energy Master Plan and the Regional Greenhouse Gas Initiative, but no analogous discussions for implementation of the LEV standard.
- Implementation plans are key. Articulation of the goal is not sufficient to reach our GHG targets; we need specific policies and incentives.
- New vehicle sales are down because of the economy. No one is going to buy cars that meet the LEV standards at a time when no one is buying cars at all.
- Auto industry asserts that it offers what consumers demand. "We build what consumers want."
- If there were a demand for plug-in electric vehicles and other low emission vehicles in the U.S., the auto industry would offer such vehicles. Counterargument: The auto industry *creates* demand via advertising and marketing; demand for electric and other low-emission vehicles would increase if the auto industry provided supply and marketing/advertising re: availability, desirability.
- Why are there automobiles offered for sale in Europe and South America that aren't offered in the U.S.? Safety requirements, emissions requirements, significant price difference between Europe and the U.S., city design, small roads, lack of storage (garages), high fuel taxes, differences in disposable income. Gas prices in Europe are stable. Price consistency allows for certainty on the part of manufacturers.
- Use of electric vehicles displace electricity generation to dirty states. This is good for NJ, but bad for the world. It is necessary to look at this holistically, do lifecycle analyses.

- Opposition to incentives for electric vehicles (EVs) and compressed natural gas (CNG) vehicle infrastructure: Current battery technology performance and cost are the major obstacles preventing widespread deployment of electric vehicles (EVs). Under current market conditions, there is no credible evidence suggesting that EVs can even modestly penetrate the market over the near- to mid-term. Plug-in Hybrid Electric Vehicles (PHEVs) can help demonstrate and improve battery technology needed for EVs, so can be a bridge to widespread adoption of electric vehicles. Supportive policies will enable PHEV technological improvements and cost reductions. Near-term incentives for electric vehicles or compressed natural gas (CNG) vehicle infrastructure would distract consumer focus from PHEVs, dilute government resources, and undermine transition to zero emission vehicles.
- Craft policies to aggressively promote and enable adoption of PHEVs in the near term via (1) financial incentives to offset expected cost premiums, and (2) as per the Draft Report, support pilot infrastructure projects to develop and demonstrate electric filling stations around transit hubs and densely populated areas.
- Automatic Meter Infrastructure (AMI) technologies will be needed to enable adoption of PHEVs/EVs. AMI technologies will facilitate off-peak pricing and ability to sell back PHEV/EV power during peak use, thus making PHEVs/EVs more economical for consumers, and facilitating peak load management by EGUs.
- Electrification of transportation will affect the electric power sector's CO2 budget. Electric power generators should not be penalized for enabling emissions reductions in the transportation sector.
- Recommendations regarding Zero Emission Vehicles (ZEV) cannot be relied on for reduction calculations. Given the uncertain nature of both alternative fuel and electric car technologies, it is premature to rely on ZEVs to provide any more than aspirational emissions reductions.

Feebates

- Automobile manufacturers are opposed to feebates.
- Feebates unfairly and disproportionately affect sectors that require larger vehicles (example: farmers, construction workers, large families.)
- Alternative to feebates: provide incentives for purchasing hybrid electric vehicles.
- Gas tax is a more fair and effective method of changing behavior than feebates.
- Feebates don't work. Canada eliminated its feebate program.
- Support for feebates: Implement tax incentives designed to promote low-emission and zero-emission vehicles, including tax breaks for clean cars and tax penalties for the dirtiest cars on the road.

Medium-duty delivery-type trucks – conversion to hybrid electric

- Accomplish this via voluntary transition, not mandatory. Electric costs for the commercial/industrial sector are very high. It is unfair to mandate change when no efforts have been made to reduce electricity prices for this sector.
- Provide incentives to the business community. Tip the business case.

Incentives related to purchase of fuel efficient vehicles

- On a typical $28,000 purchase, 10-15% cash will move someone to purchase something they wouldn't ordinarily have purchased.
- "Offset bank" will generate revenues at point-of-purchase: increase the sales tax, and direct a percentage of the tax towards incentives for purchasing fuel-efficient vehicles.
- Take advantage of the impending federal stimulus bill to fund these initiatives. Pursue other federal grants to support these initiatives
- *Cash for Clunkers* Pre-1997 vehicles are inefficient, have no onboard diagnostics. Provide incentives for purchasing new fuel efficient vehicles and for getting these old vehicles off the road.
- Pennsylvania and other states "put cash on the hood" toward consumer purchase of California LEV vehicles.
- Without incentives to purchase new fuel efficient vehicles, it will be harder to meet GHG goals. NJ receives 8.5 – 9.0% tax on new sales. This is a drag on sales. This has a high impact on the State Treasury.
- The State should subvert leases for new fuel efficient vehicles (that is, the State should guarantee the residual.). A subverted lease artificially inflates the residual, in effect subsidizing subsidized monthly payments. Reduced monthly payments would serve as an incentive for the purchase of vehicles. The State can buy insurance on that increase in residual; if the residual doesn't increase as much as the State expects, the insurance will cover the State's loss.

Outreach, Education and Advertising

- *Tune Up or Trade Up Campaign* – marketing campaign targeted to owners of older vehicles.
- *Ecodriving Campaign* – industry-sponsored education campaign. States can sign on to the campaign.
- Consider life cycle cost advertising.
- Consider life cycle "greenness" advertising. Counterargument: Lifecycle analyses is complicated. Example: nickel batteries are to be green because they power electric hybrid vehicles. However, the environmental impacts of nickel mining are substantial; batteries are shipped to and from several countries, creating emissions, there are disposal issues, etc.
- Environmental Performance Labeling will be available this year.
- Consider and publicize the economic development potential of the fuel standard that is implemented. This can increase public support.

- Engage students and teachers in transportation and land use school projects.
- Ecodriving should not be emphasized as an integral component of the 2020 recommendations. While its efficacy is touted by AASHTO, its potential appears to be calculated assuming full participation – the 22% representing emissions caused by inefficient driving, is not a capturable 22% reduction in our carbon footprint. Gains derived from ecodriving require a massive shift in individual behavior. While it is foreseeable that an extensive educational campaign would produce changed behaviors in some, the uncertain participation and difficulties quantifying the gain undercut ecodriving's viability as a cost-effective measure for the purpose of reaching GWRA goals.

Environmental justice

- Caution: Encouraging purchase of new vehicles has environmental justice implications. Old inefficient vehicles go to the city and die there.

Greening the State fleet

- Have State employees use trains for travel related to State business.
- There are LNG vehicles in the State fleet, but only three fueling stations.
- Use "smart scheduling" (electronic scheduling) for State vehicle reservations, within NJDEP and among other State departments to facilitate carpooling for State business.
- Share services with municipal fleets.
- NJ doesn't have E85 ethanol fueling stations, so it is not possible to use E85 in the State fleet.
- Use new technologies to improve State fleet efficiency. Example: there is a filter that will eliminate the necessity for 90% of oil changes.
- Government should pick winners from among the various emerging technologies. To reach impending GHG goals, go with the technologies that are available now. The marketplace has already picked some of the winners.
- Cautionary tale: the federal government tried to pick a winner (hydrogen). This approach didn't work. Government shouldn't pick winners. But it *can* identify losers.
- Explore the possibility of telecommuting for state employees to reduce vehicle miles traveled.
- Green the municipal fleets and buses as well.

Infrastructure / Transportation / Vision / Mass Transit

- There is no tie in the report to the Transportation Trust Fund, which will run out of funds this year.

- Emphasize existing infrastructure. This is an easier fix with fewer variables than the tailpipe approach.
- Be more specific with respect to how we're going to fix transit. Implementation plans are key
- Complete Streets is a good policy.
- There is a conflict between State agencies. The State advocates for HOT lanes, while at the same time increasing the number of lanes on the turnpike.
- Create a real rail line for Jersey Shore communities. This would reduce Shore traffic, which would reduce GHG emissions.
- Increase east-west transit options.
- Promote the vision on a collective basis. Get all of the transit agencies together to promote transit.
- Employ dual use of existing rights-of-way. Do mass transit (monorail, etc.) on highway medians, beside highways, etc. This costs less than building on new rights-of-way, or than restoring lost rail lines
- Green Acres funding is used to preserve land; use this funding to preserve bicycle paths and railroads. Rails-to-trails is a nice concept, but it is much more expensive to build railroads on new rights-of-way than on existing rights-of-way.
- Extend the light rail service into Burlington County via Mount Holly before Gloucester County. The Mount Holly area has a high population density and the infrastructure is already in place rather than having to purchase new right of way, build the rails, etc.
- The Jersey City light rail was a huge success and should be implemented in other densely populated areas in NJ. The towns of Trenton, Newark, Somerville, and the shore have a large area that could support these types of projects.
- Add solar panels to electrification stations.

Green corridor

- A clean and green corridor would definitely benefit the state. Vegetation can be planted in major highway corridors such as NJ Turnpike, Route 78, Route 80, Route 295, and Route 195. Landscapers would volunteer to complete these projects if it meant recognition. Perhaps plaques and photos could be submitted and put onto the DEP website.
- Remove demonstration projects that are not appropriate for meeting the goals of the Global Warming Response Act. For example, the NJ Turnpike Authority "Clean and Green Corridor" Program is a farce, given the State's current plans to widen the Turnpike by six lanes. The first paragraph states a number of environmental-focused recommendations that run entirely counter to the Turnpike Authority steadfast plans to expand its highways.

General comments

- The plan puts the burden on manufacturers and dealers. NJ doesn't provide the infrastructure for manufacturers and dealers to do the right thing. Example: insufficient LNG fueling stations.
- Build a retrofit industry in NJ. Allow new car dealers to retrofit existing vehicles with higher efficiency technologies. This would help new car dealers because it would provide a new revenue stream. Use the purchasing power of State and municipal governments to spur this new industry.
- It takes time for vehicle manufacturers to produce more products. There is a pipeline; changes can't happen overnight.
- Coordinate State initiatives so they complement one another. Example: since the State is promoting offshore wind for renewable electric generation, the State should also promote plug-in electric vehicles.
- Include buses in anti-idling regulations, as well as trucks.